

4138

U. S. COAST AND GEODETIC SURVEY

NOV 22 1920

FORM NO.

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: *Florida*

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. *4138*

LOCALITY:

*Key West to Sand Key Lt.
and Boca Grand Key*

1919

CHIEF OF PARTY:

C. H. OBER

G. C. MATRISON

F. B. T. Siems

4138

MAN KEY.

The location of the signals on Man Key for inshore hydrography was done by a plane table traverse. The traverse ran along the shore line on the southern side of the island, but on account of the mangrove trees overhanging the water's edge on the northern side, it was necessary to carry the traverse out in the water. The distance between stations was somewhat limited because of the difficulty experienced with the heat waves from the ground, and also to make sure of the distance, as there were no signals visible from which to get a "three point fix" or from which to resect.

The topography of the key has apparently changed very little.

The following signals were located by the plane table traverse:

- GROV. A whitewashed slatted signal.
- TAR. Ditto, only somewhat smaller.
- DON. Similar to GROV. Near the naval practice target.
- ROB. Similar to TAR, at extreme eastern end of western island.
- HO. Two white flags on flagpole of shack on northwestern end of eastern island.
- GET. Whitewashed slats on pole of unused naval rifle target. Southern end of eastern island.
- WIL. : Whitewashed slats in water on northern side of island.
- WAT. :
- CRAB. Whitewashed slats on extreme western end of western island.

WOMAN KEY.

The topography of Woman Key was run by plane table traverse. On southern side of island, it was carried along the water's edge, and stations checked by resections from Sand Key Lighthouse. Along northern side, it was carried out in the water (because of overhanging mangroves) by just an ordinary traverse, there being no signals to resect from. A cut has been made through the island where formerly there was a narrow strip of land. At the present time there is a naval rifle range along the southern shore, and a bridge connects the two islands. The Navy also has a second rifle range on the eastern end of the island, and has built a long pier extending out from southern side of eastern island.

The following signals were located:

WOMAN KEY (Continued)

- (1) Whitewashed slatted tripod.
- (2) " slabs on tree.
- (3) Flags on telegraph pole at eastern end of island.
- (4) Pole with red flag at pit end of eastern rifle range.
- (5) Whitewashed slatted tripod.
- (6) " " " northwest point.
- (7) " " " western side--middle.

Ronald R. Moore
D.O. USC & GS.

STATISTICS SHEET NO. 2.

Date, 1919.	Letter	Volume.	Positions.	Soundings.	Miles Statute	Vessel.
March 4	A	1	115	615	21.0	Ship.
March 5	B	1	139	777	20.2	"
March 10	C	1	101	529	14.0	"
March 10	C	2	15	77	7.0	"
March 14	D	2	78	404	11.9	"
March 15	E	2	77	408	11.7	"
March 19	F	2	111	589	17.0	"
March 20	G	3	108	510	15.3	"
March 21	H	3	83	529	12.1	"
March 24	J	3	79	327	9.6	"
March 25	K	3	56	231	6.8	"
March 25	K	4	44	189	5.9	"
March 31	L	4n	118	546	18.7	"
April 1	M	4	116	549	16.0	"
April 2	N	4	28	223	5.5	"
April 3	P	5	106	534	17.9	"
April 7	Q	5	124	664	20.9	"
April 8	R	5	100	589	16.9	"
April 8	R	6	39	221	7.3	"
April 9	S	6	122	722	23.0	"
April 17	T	6	109	646	21.1	"
April 18	U	6	36	199	9.5	"
April 18	U	7	55	321	5.6	"
May 5	V	7	77	475	9.1	"
May 15	W	7	102	507	13.6	"
May 16	X	7	107	444	44.2	"
May 19	Y	8	10	67	1.6	"
July 3	Z	8	35	55	4.2	"
July 7	A'	8	150	360	17.0	"
March 14	A	1	107	724	16.7	Launch
March 15	B	1	28	221	3.5	B. B. B.
March 18	C	1	75	557	8.0	"
March 19	D	1	39	376	4.8	"
March 19	D	2	38	602	8.2	"
March 20	E	2	119	936	14.2	"
March 21	F	2	65	600	8.2	"
March 21	F	3	26	253	4.0	"
March 24	G	3	126	1154	18.0	"
March 25	H	3	89	915	13.1	"
March 25	H	4	11	116	1.6	"
March 26	J	4	123	1226	16.2	"
March 27	K	4	6	61	1.1	"
March 31	L	4	127	806	18.1	"
March 31	L	5	3	14	.4	"
April 1	M	5	132	1326	17.5	"
April 2	N	5	112	1022	11.2	"
April 2	N	6	30	275	4.5	"

STATISTICS SHEET NO. 2 CONTINUED.


Date, 1919.			Letter	Volume.	Positions.	Soundings.	Miles statute	Vessel.
April	3	.....	O	6	35	265	4.2	Launch
April	4	.....	P	6	117	1067	10.5	B.B.B.
April	7	.....	Q	6	98	609	12.4	"
April	7	.....	Q	7	8	79	1.1	"
April	8	.....	R	7	113	1066	13.8	"
April	9	.....	S	7	109	982	13.6	"
April	10	.....	T	8	84	996	13.0	"
April	11	.....	U	8	111	1184	15.0	"
April	17	.....	V	9	152	1080	14.0	"
April	18	.....	W	9	122	1227	15.1	"
April	18	.....	W	10	2	28	.4	"
April	26	.....	X	10	78	522	8.1	"
April	28	.....	Y	10	104	1078	16.0	"
May	1	.....	Z	10	56	492	6.4	"
May	1	.....	Z	11	50	385	5.5	"
May	2	.....	A'	11	74	534	9.8	"
May	5	.....	B'	11	88	627	10.2	"
May	6	.....	C'	11	73	643	9.7	"
May	6	.....	C'	12	16	139	2.5	"
May	7	.....	D'	12	89	801	11.8	"
May	14	.....	E'	12	5	25	.9	"
May	15	.....	F'	12	133	1096	20.3	"
May	16	.....	G'	13	146	830	17.2	Mandalay
May	19	.....	H'	13	93	591	13.6	"
May	20	.....	J'	13	107	776	13.5	"
May	21	.....	K'	14	49	240	6.0	"
May	22	.....	L'	14	132	1270	20.3	"
May	23	.....	M'	14	99	688	11.2	"
May	23	.....	M'	15	15	119	1.5	"
May	24	.....	N'	15	100	690	9.0	"
May	26	.....	O'	15	61	508	6.0	"
May	27	.....	P'	15	100	845	13.4	"
May	27	.....	R'	15	30	317	3.0	"
May	28	.....	Q'	16	138	797	18.0	"
June	9	.....	R'	16	110	756	13.0	"
June	9	.....	R'	17	157	1066	20.0	"
June	16	.....	S'	18	172	1347	23.7	"
June	17	.....	T'	17	144	1361	23.0	"
June	18	.....	U'	17	66	625	9.6	"
June	19	.....	V'	18	89	866	13.8	"
June	21	.....	W'	19	48	397	6.5	"
June	23	.....	X'	19	123	1051	16.7	"
June	27	.....	Y'	19	86	868	15.4	"
June	27	.....	Y'	20	47	483	9.6	"
June	30	.....	Z'	20	94	578	12.0	"
July	1	.....	A''	20	180	1124	25.0	"
July	2	.....	B''	21	213	1168	28.5	"
July	3	.....	C''	21	152	793	22.5	"
June	10	.....	U'	18	9	93	0.8	"

STATISTICS SHEET NO. 2 CONTINUED.

Date, 1919.			Letter	Volume.	Positions.	Soundings.	Miles statute.	Vessel.
								Launch
								Mandalay.
July	5	.....	D"	22	74	325	8.7	"
July	7	.....	E"	22	119	858	18.5	"
July	8	.....	F"	22	146	921	20.9	"
July	9	.....	G"	23	134	847	11.0	"
July	10	.....	H"	23	162	470	7.5	"
July	11	.....	J"	23	69	446	6.2	"
July	12	.....	K"	24	59	463	7.2	"
July	15	.....	L"	24	83	645	7.5	"
July	17	.....	M"	24	54	248	4.5	"
July	18	.....	N"	24	49	288	3.5	"
July	18	.....	N"	25	147	849	10.9	"
July	19	.....	O"	25	70	267	4.5	"
July	21	.....	P"	25	139	800	9.2	"
July	22	No Work.						"
July	23	.....	Q"	26	57	542	8.2	"
Total.					9526	66739	1258.3	

Billings of Waples. Sheet #2 Ship

Object and Description	Method of Locating	Lat	DN	Long	U.P.	Remarks	Height feet	Sketches and additional notes	Kind of Signal
1 Land, Key Light #8-1853-905	Δ	24 27	4130	81	52	1146			red *
2 Eastern by Bay Beacon (1913)	Δ	24 27	1245	51	58	10975			red *
3 Tom (Mum Fleet) Middle	Hydr. Buoy	24 28	1785	81	49	52	8		Mum Buoy
4 Joe (Mum Fleet) Middle	Hydr. Buoy	24 29	1785	81-50	45	57			Mum Buoy
5 Eastern by Beacon 1913	Δ	24 30	1026	81-48	3626		25'		Mum Buoy
6 Three Central St. Taylor 1913	Δ	24 32	1473	81	48	3259			White Sound
7 Telegraph St. Taylor	Δ	24 32	1583	81	48	1046			White Sound
8 North Range Beacon (1913)	Δ	24 32	1711	6	48	7419			White Sound
9 W. Radio Tower Middle 1917	Δ	24-33	1746	81-48	6346		150		White Sound
10 North Middle Tower 1917	Δ	24-33	1749	81-48	6398				White Sound
11 G. Middle Tower 1917	Δ	24-33	1630	81-45	51696				White Sound
12 Key West Lt. No. 1	Δ	24 33	463	51	48	1046			White Sound
13 North West Church Spire (1905)	Δ	24-33	1623	81	48	2356			White Sound
14 Key West Lt. No. 2	Δ	24-33	1701	381	48	7197			White Sound
15 Bent	Hydr. Buoy	24 27	136	81	53	467			White Sound
16 Kingfisher Island	Δ	24 33	1524	81	51	1175			White Sound
17 Saw	Δ	24 32	1519	81	53	10921			White Sound
18 Red Flag Buoy	Hydr. Buoy	24-31	1575	81	55	210			White Sound

				Signals		Sheet #2		Ship			
Method	date	DN	long	Lat	Remarks	Height	Sketches	Signal	Remarks		
19	24-31	1453	81-55 335								
20	24-31	1330	81 55 302								
21	24-31	1129	81-55 892								
22	24-31	1054	81-55 11634			30'					
23	24-31	840	81-55 585								
24	24-32	678	81-55 882								
25	24-31	1416	81-55 1197								
26	24-31	1174	81-56 663								
27	24-31	1485	81-57 144								
28	24-31	922	81-57 1459								
29	24-31	536	81-57 1653								
30	24-31	469	81-57 1423								
31	24-31	769	81-58 282								
32	24-31	1192	81-58 456								
33	24-31	739	81-58 543								
34	24-31	744	81-58 837								
35	24-31	877	81-58 1302								
36	24-27	1425	81-54 1602								

Object and Description	method of locating	date	on long.	DP	Remarks	Height	Kind of animal
37 White	5. A H	24-32	214	81-58	1306		Beak X
38 Back	5. A H	24-32	705	81-59	594		Beak X
39 Back granules	A	24-31	1518	51-59	16020		white X
40 Bell	OT	24-32	91	82-00	13		white X
41 Call	OT	24-31	1279	82-00	337		white X
42 Buff	OT	24-31	1200	82-00	685		white X
43 Old	OT	24-31	1865	82-00	832		old dead tree
44 Duck	OT	24-31	1399	82-00	839		clump of dead bushes
45 Gray	OT	24-31	1735	82-00	961		white X
46 Foot	OT	24-32	151	82-00	994		white X
47 Race	A	24-32	4130	82-00	870-9		black X
48 AT	OT	24-32	570	82-00	445		white X
49 Bin	5. A H						white X
50 Cue	OT	24-31	1294	81-55	604		white X
51 Bob	OT	24-31	1890	81-55	685		white X
52 Dec	OT	24-31	1849	81-55	699		white X
53 Ho	OT	24-31	924	81-57	1455		white X
54 Wats	OT	24-31	1153	81-58	870		white X
55 apt	OT	24-31	525	82-00	439		white X

Aspect and description	Locality	Position of signal	Sheet #2
57 RS. Runway	54 H 24-34 203 81-50 199	Black X	121-35 Black Beacon - King
58 Jorin	54 H 24-33 330 81-51 270	Black X	41-32 dugout - Root
59 Pale	54 H 24-33 913 81-51 437	Black X	110-14 Root - King
60 Root	54 H 24-33 905 81-51 437	Black X	103-9-5 Root - King
61 Cae	54 H 24-32 1035 81-51 1446	Black X	137-35 Root - King
62 Root	54 H 24-32 1075 81-52 935	Black X	49-01 dugout - King
63 Root 2	54 H 24-32 1515 81-52 973	Black X	54-15 Root - King
64 dog	54 H 24-32 930 81-52 1114	Black X	12-14 Root - King
65 dog	54 H 24-33 635 81-53 495	Black X	103-9-5 Root - King
66 dog	54 H 24-32 927 81-53 139	Black X	49-01 dugout - King
67 dog	54 H 24-32 1101 81-54 595	Black X	54-15 Root - King
68 dog	54 H 24-31 1116 81-54 186	Black X	12-14 Root - King
69 Jan	54 H 24-32 1380 81-54 1271	Black X	103-9-5 Root - King
70 Bar (1919)	54 H 24-32 1028 81-55 239.25	Black X	12-14 Root - King
71 Joe	54 H 24-32 1003 81-55 606	Black X	103-9-5 Root - King
72 Joe	54 H 24-32 192 81-55 762	Black X	12-14 Root - King
73 Joe	54 H 24-31 1675 81-55 355	Black X	103-9-5 Root - King
74 Met	54 H 24-31 1438 81-55 61	Black X	12-14 Root - King
75 May	54 H 24-32 205 81-57 971	Black X	103-9-5 Root - King

DIRECTOR
ADDRESS THE COMMANDANT
U. S. COAST AND GEODETIC SURVEY

REFERENCE TO NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS.

REPORT ON HYDROGRAPHIC SHEET No. 4138.

Surveyed in 1919.

Chiefs of Party: C. H. Ober and
G. C. Mattison.

Surveyed by C. H. Ober, G. C.
Mattison & O. M. Straub.

Protracted by C. D. Meaney & F. M. Albert.

Soundings plotted by F. M. Albert.

Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The specific instructions on which work is based could not be found, but it is believed that the plan and extent of the survey conform to the instructions.
4. In general the sounding crossings are adequate.
5. The data was sufficient to completely draw the depth curves.
6. The field plotting was not completed to the extent prescribed in General Instructions, a portion only of the positions having been plotted in the field and none of the soundings were by the field party.
7. Although the development of shoal areas is very complete there are numerous indications of shoaler depths which can be investigated satisfactorily only by the wire drag.
8. The shorelines of Boca Grande Key, Man Key and Woman Key were traversed by the hydrographic party. The new survey of Woman Key is shown on a tracing which is attached to the descriptive report, but the new surveys of Boca Grande and Man Keys were shown only in pencil on one of the boat sheets. These were transferred in the office to the smooth sheet on the advice of Mr. Mattison. *Signals Ho and Get are located on an island east of Man Key. This island is shown on topo. sheet #319.*
9. The character and scope of the surveying are excellent, as well as that portion of the protracting that was done by the field party.
10. Reviewed by E. P. Ellis, June, 1921, and two copies of this report to be sent to the Division of Hydrography and Topography.

Hydrographic Sheet # 4138
Florida Reefs and Shoals

The work developed on this sheet appears to have been done to cover certain areas not covered by the wire drag. These areas have been carefully gone over, lines being closely run and sounded. and would appear sufficient to develop bottom conditions as nearly accurate as can be obtained with the sounding lead method, but in comparing with Chart No. 584 many shoal spots appear which this latter survey does not develop. The sheet was ^{partially} protracted, by the field party and completed in this office and although many verifications of this portion of the work was made no serious errors were discovered.

The pencil plotting was done in this office and found to be quite up to the standard and indicated care and intelligence. The paper used is of a inferior quality being closely allied to blotting paper and full of fiber which made good and rapid work impossible. ^{The use of} This character of paper should be avoided if possible.

John D. Torrey
May 18 1921

DIRECTOR
ADDRESS THE SUPERINTENDENT
U. S. COAST AND GEODETIC SURVEY

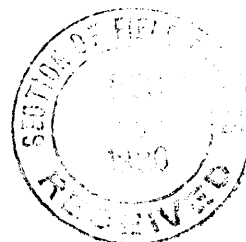
AND REFER TO NO.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

December 16, 1920.



Division of Hydrography and Topography: *note R&A*

Division of Charts:

Tidal reductions are approved in
34 volumes of sounding records for

HYDROGRAPHIC SHEET 4138

Vicinity of Key West, Florida.
G. C. Mattison and C. H. Ober in 1919.

Plane of reference is
Mean low water, reading

3.00 ft. on tide staff at Sand Key Lighthouse.
2.71 ft. " " " " Marquesas Key.

Condition of records: Satisfactory.

G. V. Rude

Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4138 Field No. 2

State . Florida

General locality . Florida Reefs, Vicinity of Key West.

Locality . Key West to Boca Grande Key.

Chiefs of party . C. H. Ober & G. C. Mattison

Surveyed by . C. H. Ober, G. C. Mattison, O. M. Straube

Date of survey March 4, 1919 to July 27, 1919.

Scale 1:15,000

Soundings in

Plane of reference

Protracted by O. D. Meaney ^{Meaney} & F. M. Albert Soundings in pencil by F. M. A.

Inked by J. D. Torrey Verified by J. D. Torrey

Records accompanying sheet (check those forwarded):

Des. report, ✓ 8 Sand Key L. H. Tide books, _____ Marigrams, ✓ 4 Boat sheets,
✓ 34 Sounding books, ✓ 1 Angle ~~Wire~~ ~~xxx~~ books, 0 Photographs.

Data from other sources affecting sheet Triangulation 1919.
Traingulation data in Report of Supt. 1911. Monthly progress reports dated February 26, 1919. March 29, 1919. April 28, 1919, May 29, 1919. June 28, 1919, and Seasons Report of Chester H. Ober June 4, 1919.

Remarks: Descriptive report to be obtained from Messrs. Ober and Mattison.

As noted on one of the boat sheets, some of the shoals on West end of sheet # 2 were developed on Sheet # 3.

J. D. Torrey

Applied to compilation 576 J.M.A. Dec. 1940

" " d.w.g.

"

R.K.D.

Aug. 1956

In area from which
title was moved.

Chart 584 - 4/1/57 M. Rogers added 10 fm curve.